THE GENESEE FARMER.

Vol. IV. **ROCHESTER, APRIL 12, 1834.** **No. 15.**

Published by Luther Tucker.

TERMS.—The Farmer is published every Saturday, making an annual volume of 416 pages, to which is added a Title-page and Index, at the low price of $2,50, or $2.00 if payment is made at the time of subscribing.

☞ All subscribers must commence with the volume, Jan. 1, or with the half volume, July 1. No subscription taken for less than six months.

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THE GENESEE FARMER.

SATURDAY, APRIL 12, 1834.

On the Study of Botany.

Some of our friends who are fond of flowers, and who enjoy the prospect of elegant shrubs and shade trees,—have spoken to us at different times to the following import: 'We should like to be botanists. When we find a plant remarkable for its beauty or singularity of appearance, we always want to know if it has a name? and if it has been found in other places or countries? We also observe that botanists are often delighted at the sight of plants which have no beauty in our eyes; and we wish to partake of that pleasure, and better to understand its origin. But we are met at the threshold by a host of *hard names* which discourage us at once; and which we feel sure that our memories cannot master without unreasonable labor.'

In reply, we have assured them that the difficulty is more specious than real. 'To learn one thing at a time' is the grand secret. We may gaze on the face of a lofty precipice, and wish to ascend it; but how can we ever reach the summit? By advancing, *step by step*, on some winding path in its rear. The athletic soldier who was set by *Sertorius* to pull out the hair from a horse's tail was unsuccessful because he grasped it altogether; but the feeble man who took *a hair at a time*,* readily accomplished his task. If we settle in a place hitherto unknown to us, and meet all our new neighbors at a raising, or a town meeting, we are bewildered with the crowd of strange faces; but if we go round amongst them as an assessor, and see them *one at a time*, the difficulty is easily overcome, and we can soon call each by his proper name.

If we proceed on the same principle when spring opens, and take up the first flower that we find in the woods, we shall have but one object to attract our attention. We will suppose that the student has been apprised that *the first point is to find out the genus*; and that the characters which determine it, chiefly reside in the flower. From a Botanical Dictionary, the words *calyx, petals, stamens, style, stigma, capsule*, &c. are as easily learned as the same number of words in any other Dictionary. Well, he has selected a plant; and has *Eaton's* Manual, or *Torrey's* Compendium at hand: now how is he to proceed? He finds there are *five* stamens and *one* style which refers him to PENTANDRIA MONOGYNIA. The flower has five petals; so he passes quickly from Section to Section of *that great Class* till he comes to the one marked D. (Eaton's Manual, 5th edition) with *flowers five petaled, inferior—seed in a capsule*. He may ask what is the meaning of the word, "*inferior?*" Inferior to what? and we should direct him to the Botanical Dictionary. He may there read, "A calyx or corol is *inferior* when it comes out *below* the germ." He discovers that the word is more restricted in its meaning than it is in common use; but it is quite as plain; and on looking at the plant, he finds that the petals come out *below* the germ. So far he is right. But to which of these genera does it belong? Let us see: the calyx of our plant is *two*-cleft, therefore it cannot be an *Itea, Viola, Ceanothus, Euonymus*, nor *Celastrus*, all of which are *five*-cleft. Neither, though the calyx is *two*-cleft, can it be an *Impatiens*, for its corol is "*irregular* with a horn behind," and our plant has *regular* petals, without any such appendage. The only genus then remaining, which is not Exotic or Southern, is CLAYTONIA. It is true the book says "corol 3-petaled," but the "3" is manifestly a typographical error, for it contradicts *the heading* of the Section. Some great men have not time to oversee the printers; and though the student may be sadly puzzled with such inaccuracies, the difficulty is not insuperable. By turning to another author he will be instantly set right, and will learn the advantage of having two strings to his bow.

We have now *probably* got the right name, and we will proceed *more closely* to examine its character: "*Calyx* 2-leaved. *Petals* 5, emarginate. *Stigma* 3-cleft. *Capsule* 1-celled, 3-valved—3 to 5-seeded. *Seeds* reniform." Yes—the plant and the description entirely agree, except that it is almost too early in the season to be quite certain about the seeds.

The next thing is to find out the species. How will our plant agree with *Claytonia virginica?* the only species* found in the Middle States. Its specific character is, "Leaves *linear-lanceolate;* petals *obovate, retuse;* leaves of the calyx somewhat *acute;* root *tuberous.*" For the words in *italics*, search the Botanical Dictionary. All agree with the specimen before us; six or eight new words are learned in this lesson, and the CHARACTER and SCIENTIFIC NAME of the plant.

The Equation of Time.

The earth revolves on its axis with such perfect uniformity that according to Baron *Fourier* it has not varied one hundredth part of a second in two thousand years. If this globe had no other motion, the sun would come every day to the meridian at the same instant of time, and the length of the *solar* day would be invariable. The motion of the Earth in its orbit however, imparts to the Sun an *apparent* motion to the east-ward; and therefore the Earth has to turn besides once round on its axis as much further as the Sun has gone east since it last left the meridian. The *average* period of this revolution* is 24 hours. If this motion of the Sun to the east-ward was *direct* and *regular*, each *solar* day would still be of the same length; but its motion is variable, passing through the *northern* half of the signs of the Zodiac in seven days less than through the *southern* half; and consequently its progress to the east, must be variably accelerated or retarded. This is *one* cause why a well-regulated time piece cannot from day to day agree with the Sun. But there is *another* cause to be considered in computing the Equation of time: When the Sun is at its greatest declination, its motion is *direct* to the east; while on the contrary when it is crossing from one tropic to the other, its progress is *diagonal* or *oblique;* and consequently cannot advance as far east as when its motion is *direct*. These *two* causes of the inequality of the *solar* day, sometimes concur, and sometimes counteract each other.

One cause of the differences indicated by different time pieces, is owing to the use of the Equation Table by one part of the community, and to its total neglect by the other part; and we have often wondered why the time of the rising and setting of the Sun was not at once corrected in every Almanac, being convinced that it would tend to greater uniformity. Some readers indeed, might be startled to find that *the forenoon and afternoon were not represented of the same length*, especially as they may know that the sun rises and sets at equal distances from the meridian; but it should be remembered that when the sun comes on the meridian too late *for the average time*, it must also rise too late and set too late. We hope all this will be rendered sufficiently plain by the following example. On New Year's day at Rochester, according to *Loud's* calculation, the Sun rose at seven o'clock and thirty three minutes; and set at four o'clock and twenty seven minutes, showing that the sun on that day was eight hours and fifty four minutes above the horizon. But a time piece measuring twenty four hours to each day throughout the year, requires to be four minutes faster on that day; and therefore instead of indicating seven o'clock and thirty three minutes at sun-rise, it ought to have shown seven o'clock and thirty seven minutes. Now on this calculation the time from sun-rise till noon is four hours and twenty minutes, which added to four hours and thirty one will amount to eight hours and fifty four minutes, as before.

We have seen several Almanacs for the present year, in which the apparent time has been corrected; and it would have given us great satisfaction if it had been done simply with reference to the irregularity of the Earth's motion in its orbit. The result however has been very different. If we look in the column of the sun's rising, beginning at New-Years, we find the *time* in some Almanacs, for eight days, and in others for ten days together, *at the same minute;* while in the column of its setting there is a change of *one minute later* every day for the same period. Now we do not assert that this is *wrong* though

* We have not Plutarch at hand, and perhaps *a few hairs at a time*, were taken; although Pope says,

Then by the rule that made the horse tail bare
We pluck out year by year as hair by hair.

* A variety with *broader* and *shorter* leaves, frequently occurs in this district; and by some it has been considered as a distinct species; but we have found it of every *intermediate* form.

* A revolution of the Earth on its axis is performed in 23 hours 56 minutes and 4 seconds nearly.

we cannot explain it; but we think that it is *indiscreet* to make such innovations without some explanatory remarks. We know that some persons (probably hundreds) have bought these Almanacs, and afterwards procured others to find when the sun rises!

In Bowen's American Almanac, the effect of refraction in causing the sun to appear above the sensible horizon sooner in the morning and later in the afternoon,—has been computed; and the astronomer instead of calculating for the sun's center, has reckoned for the first and last glimpses of that luminary. These two circumstances "lengthen the interval between sunrise and sunset at Boston, when greatest, about 12 minutes;" but we very much doubt if for a mixt population, located amongst hills and vallies, these corrections will constitute an improvement.

One Almanac, though it has only one column in each month for the sun's rising, *professes* to be "calculated generally for *all parts* of the United States and Canada." This is absurd; and the writer of the Title Page, ought to be better instructed. It is only when the sun is at the Equinox that it rises at the same instant on the same meridian; and on New-Years Day, the difference even in the times of its rising at the City of Washington and Sodus Bay, is nearly a quarter of an hour. Neither can it show the time of an eclipse for *all parts* of the United States; for every fifteen degrees of Longitude, make the difference of an hour. We wish well to the worthy publishers, who doubtless overlooked that error, but we hope they will have it corrected for next year.

"The Singular Fact."

We are informed that the following lines, intended for the eye of our correspondent R. M. W., were sent to one of our Agents for the "Farmer;" and who mailed them to us (as in duty bound.) We insert them as a novelty. We think that the argument in assuming a metrical form however, has lost none of its force.

Please to try an experiment,
(No subject of merriment.)
Take a basin or skillet,
With cold water fill it;
And mark down the weight
On a paper or slate.
Then empty the dish,
(But the water retain
To be turned in again)
And put in the "fish."
Now give to the swimmer
Precisely a brimmer;
And weigh it once more—
'Tis the same as before,—
And the water left out
Weighs as much as the trout.

We observe that our poet assumes it as a fact that the fish will exactly weigh as much as its bulk of water. It is exact enough for the present purpose. The power which fishes possess of lying on the bottom, or resting near the surface of the water, appears to reside in the faculty of compressing or expanding the air-bladder.

P. S. It will be seen by the following, that R. M. W. "gives it up:"

But if some sober critic come abroad,—
If *wrong* I smile, if *right* I kiss the rod.—*Pope.*

Mr. L. Tucker—Your correspondent S. C. is correct. A fish must displace his bulk of water, and therefore must add to the weight of the tub; and so of the fishing smack—when the fish are put in, their bulk of water is displaced. You may inform your correspondent W. W. B., that I have seen fish smacks often loaded with 10,000 lbs. or 10 tons of live fish, without sinking them a hair's breadth in the water more than they were before the fish were put in. The experiment of S. C. is conclusive. I can very plainly see the reason why a fish must add the weight of his bulk of water, but I conceive that your correspondent W. W. B. does not consider gravitation in his man on horse back. R. M. W.

April 3, 1834.

Ashes as a Manure.

We invite the attention of our correspondents to the inquiry contained in the following extract of a letter from a gentleman in Elk township, Pa. and would refer the writer to the communication of our excellent correspondent *Ontario*, in another page of this paper:

"Gypsum has not yet been found in our vicinity or limestone in any considerable quantity. I am therefore anxious to find a substitute for those valuable manures. As our soil is a mixture of sand, clay, loam and gravel, I can see no objection to ashes as a substitute, yet several have cautioned me against the use of them in that way, asserting that after one or two crops they leave the land cold and lifeless. I should be much obliged if some of my brother farmers would state their opinions and experience on this subject in the Genesee Farmer."

For the Genesee Farmer.

Management of Bees.

I have been much edified with several of the statements in the Genesee Farmer on the subject of housing bees to prevent the trouble of swarming them, and the disagreeable necessity of destroying them to procure their honey; yet all the methods I have seen, I think are a little deficient in the plan of a door and the means proposed in taking the honey. I have thoughts of trying to obviate these two difficulties.

It is doubtless the better way generally, first to reduce our theory to practice, and then state the results. But as very little sacrifice will be likely to attend a failure on my plan, I will venture a description before trial.

Erect a building four feet square and six feet high, one side enclosed by a door to be secured by a lock. Divide this house with a perpendicular partition in the center, from the center of the door. Divide each of these rooms into three parts by horizontal partitions or shelves. Those six apartments connect by boring holes with an inch auger through all the partitions. Make six boxes, enclosed on all sides and both ends, exactly to fit those six apartments into which they are to be placed, with corresponding auger holes, so that bees put in one of those boxes can have access to all the six boxes. The upper side or top of those boxes should be so constructed as to be easily taken off and replaced without breaking the boxes. In the opposite side from the door, make holes for the egress and regress of the bees in the several boxes or rooms. In the end of each box adjoining the door, affix a strong cord by which to pull out the boxes when honey is wanted. And in order to have a box always ready to put in the place of one removed (before the bees build comb on the partition wall,) two setts of boxes should be prepared exactly similar and numbered, and immediately on removing a box take an empty box of the same number and put in its place.

I apprehend that bees put in such a house would not swarm until every box was filled, and by opening the door a box could be drawn out and an empty box placed in its stead, and the bees naturally would retire from the detached box and enter the house and assist in filling the new box.

W. S.

For the Genesee Farmer.

The Barberry Bush.

Mr. Tucker—A few years since I purchased a farm in this town—in the garden was a beautiful barberry bush, the pride of the former owner. It had been planted some seven or eight years, and had attained as many feet in hight, though it never had borne much fruit—its growth had been rapid, and it soon began to bear abundantly. The fruit was highly recommended as a luxury for the tea table, and not being acquainted with it, I was induced to have some prepared with sugar, pound for pound, according to rule, but was somewhat disappointed, as I found the seeds hard and very large in proportion to the size of the fruit. The skin also was thick and tough, and as there is no pulp to the berry, when brought on the table I could compare it to nothing better than skin, blood and bones, which your fastidious readers may think a very vulgar comparison.

I do not think I am apt to be superstitious, at least I would not wish to be. I was told that I would suffer from the effect of that bush, if I suffered it to grow; but not being philosopher enough to understand why that beautiful bush should injure other vegetables, it did not disturb me at all. Four years ago last summer, I had a small piece of summer rye which grew very well, and looked as if it might produce a fair crop, but when filling a blight of some kind took it—it was scarcely worth harvesting. This was about twenty-five rods from the bush. My neighbor's rye was not thus injured Three years since I had a light growth of wheat in another direction about the same distance from the bush, which was badly shrunk, and my neighbors as they passed, wondered what made my wheat look so different from theirs—my oats, though a fair growth of straw, when thrashed would not weigh much over half the usual heft. The bush still flourished, and two years last summer, I had the fairest prospect for a crop of wheat in my orchard of any farmer in our neighborhood. It was very forward, and began to fill in a very promising manner—but before the berry was half grown on the side next the bush, I perceived it began to change its aspect. Upon examination I found it dying. The chaff which contained the embryo of the berry was hanging to the stalk, and the straw drying up as though affected at the root, but I could discover nothing in the root to injure it. I called a neighbor of mine to examine it, who had been bred a farmer in Duchess county, and was once a smart, industrious, and prosperous farmer, (but alas! the intoxicating bowl proved his ruin;) but he said he never saw any thing like it. As he was an old man, and had raised much wheat, I began seriously to be jealous of my bush. The destroyer made steady progress through the field, commencing near the bush, and was ten or twelve days spreading over the whole field, as near as I can

recollect. The field contained five acres. My neighbor had a piece of wheat on the opposite side of the road and bush, sowed after corn, which was much later than mine. When it got to the same stage as mine was, it fared the same way—he cut a little on the farthest edge but never thrashed it. I never gathered any of mine, for there was nothing like flour in it. Another neighbor of mine had wheat eighty rods off, partly behind a thick pine wood, which was injured just as far as the wind could blow from the bush past the corner of the wood, and sweep across the field. This also was part orchard—the second field mentioned was clear. The appearance was so singular that it gave rise to much speculation. One man who did not know any thing about the bush, said there was something poisonous near my house, and as we lived in a land of mineral waters, thought it must proceed from a spring at the foot of a bank about ten rods off. I had rye also, a few rods from the bush—the growth was good, but nearest the bush was scarcely worth harvesting, and grew better as we got farther off. Another field of fifteen acres of rye, which was sixty rod's distance at the nearest edge, was also much better loaded the farthest side. A field on another farm about the same distance off was observed by the harvesters to be in the same situation. I am not able to say how far the effect was discernible, but should say it was nearly half a mile. There were three of us who suffered severely immediately around the bush, and as there were no complaints elsewhere, we concluded it must proceed from some local cause, and thought the barberry bush must be the thing. When the fruit was ripe I cut down the bush, and two more in the vicinity shared the same fate, as their owners were fully persuaded, if they suffered them to grow they would do much more hurt than good. I have had wheat and rye on the ground, since cutting down the bush, on which it failed before, and have had it well filled.

As I am of opinion that there is much difference in soil in regard to the probability of its blasting, I would attempt to describe our soil. It is what is commonly denominated plain land, though not that kind which is composed of fine sand drifts with the wind—neither does it rise into small barren hills and descend into cold wet swales—it is smooth, level land, laying adjoining what we call hard land, and partaking many of its qualities, but more dry and no stone—it does not heave with the frost, neither is grain apt to winter kill if it is in good heart. The three farms upon which the wheat was lost, have lately changed occupants, the old ones having run down themselves and land, under the old system of farming—the land being easy to till, was kept under the plough until it would produce but a very light crop of rye after a regular summer fallow. We have adopted the plan of clover and plaster, and find our land rapidly improving, and we can now begin to raise a little wheat. Hence we cannot attribute the failure of our crops to a superabundance of nutriment in the soil, as our land is celebrated for good berry, though the crop may not be abundant.

I submit these statements, sir, not with any ambition to appear in public, or to dictate to others; but as I have gained some knowledge from the observations of others through the medium of your useful paper, I am willing to contribue a little of my small stock of knowledge to my brother farmers, lest they should fare as hard from a shrub of no particular value, as I did from my own incredulity respecting it. It is a settled point with all who are acquainted with the circumstances of my bush, that it was the means of destroying as much grain in one year as any of our farmers generally raise. It could not have been the common rust, as it did not come on all at once; and there was very little if any rust on the straw—it would not color one's clothes to walk through it, and it continued its march whether the weather was wet or dry. Respectfully yours,

B. H.

Saratoga Springs, March 8, 1824.

For the Genesee Farmer.

Fences.

Mr. L. Tucker—As this is about the season when farmers are usually engaged in erecting or repairing their fences to secure their fields, orchards, &c., I take the liberty to give you for insertion in the Farmer, a description of some of the different kinds of fences used within the small limits of my observation, and would leave it for some one of greater experience, and a more extended observation, to state more particularly with regard to the best method of erecting and maintaining those fences, their probable durability, and the effect with regard to the interests of the owners, and the interests of those into whose hands their possessions may come.

One kind of fence now in use, but rather growing out of use, is the crooked rail fence, well staked and ridered—one other kind is the stone wall, 4½ feet high; or the half wall, 3 feet, with posts and boards; or the 3½ feet wall, with stakes and rails; but the last kind that I would mention, and one that for some years has been rapidly coming into use, is the live fence more generally built by the sides of orchards, and composed originally of rails, next of briars, burdocks, &c. springing up inside, and the pruning of the trees thrown over and upon the top, and upon the road side usually a stout growth of Canada thistles, and altogether forming a barrier that is not likely soon to be encountered by the timerous. Yours, truly,

April 8, 1834. A Rustic.

On the Conducting Power of Trees.

In answer to your correspondent W. H. (page 53) I may say that I have seen one beech tree that had been struck by lightning. I presume all that relates to the effects of that fluid on trees may be referred to their conducting powers. Resinous trees are more *imperfect conductors* than green maples; and on this account the traces of the lightning will be more conspicuous; but the *great height* of some pine trees, and the *depth* of their roots, leading through the dry ground, down into the *moist* earth below, may more than compensate for the resistance which the lightning meets in its passage along the grain of the wood. The beech and the maple have generally *shallow* roots. Those of the basswood are *deeper*, and that tree is more frequently struck. The notion has been popular that lightning was partial to the black walnut; but in that district it was almost the only forest tree that was allowed to stand in the fields, and its roots generally go *deep*.

The shattering of a tree by lightning may be owing to two causes. The first is, its being an *imperfect* conductor: that is, it offers resistance, and fares accordingly. A *perfect* conductor of proper size retains no traces of the passages of electricity. The other cause is, the *greatness* of the discharge. Perhaps in one year in the same neighborhood, no two streaks of lightning are of equal force. I have known the same tree to conduct a moderate discharge with little damage; and afterwards, when the shock was tremendous, to have nothing left standing but a stub. I have been informed of one half inch lightning rod that was shivered into pieces down to the ground when the charge was too great for it; and yet it saved the barn. In haste,

A Reader.

Posts.

There have been some remarks published in the Genesee Farmer upon the subject of setting posts butt end up, in order to insure more durability. We were last summer informed by Mr. North of Augusta, that he set, several years ago, two posts near the river at the landing in Augusta not far from the Kennebec Hotel. One of the posts was set butt end up, the other was set the butt end down. He states that both were equally sound when placed in the ground, but that the one which was set butt end up is now sound and good, and that the other is decayed.

His mode for accounting for the difference in preservation is the following, viz: that the tubes in the wood through which the sap ascends while growing, are furnished with valves or separations to prevent the weight of the sap from pressing back. That if the post be set in the ground with the small end up, the moisture would rise in the same manner that the sap did, and thus hasten a decomposition of the wood, but if set in the other position the valves or partitions would prevent the moisture from rising at all. This theory is plausible, but whether true or not we cannot say, or whether setting a post with the small end downwards will cause it to last longer than otherwise, we cannot say from any experience that we have yet had ourselves. One method, however, is certain, viz: charring as mentioned by Carolus. And we have also found that by heating the whole of the post even if it be not charred it will increase its durability.

There seems to be a sort of low state of vegetable life remaining in wood even after it has been cut for some length of time; and the action of this vitality does seem, in a manner inexplicable to us, to produce decay. The shipwrights in the English Navy Yard have become aware of this sort of morbid life, if we may so speak, and they have adopted the plan of soaking their ship timber in a weak solution of corrosive sublimate, in order to destroy this kind of action and preventing what is called the dry rot in timber. We have lately received the February number of the Mechanic's Magazine, in which we find some remarks on the subject of preventing the decay of timber by saturating it with lime. We shall pub lish it in our next.—*Maine Farmer.*

Italian Rye Grass.—In the Transactions of the Highland Society, we find an article on this subject, by Mr. Charles Lawson:

This plant is said to be distinguished from the common rye grass (Lolium perenne,) by its larger leaves, by its being of a deeper green, and by the greater hight to which it grows. It is usually sown in autumn, as is the general practice with grass seeds in the south of Europe. After the field is harrowed, it is sown at the rate of from 16 to 18 lbs. per acre, and the seed rolled in. In the following autumn, the turf is covered like an old meadow, and the crop of the following year is more than double. It may be also sown in spring. If it be sown with clover or lucerne, its growth is so rapid that it will quickly choke them. It is eaten greedily by cattle, whether green or dry, and yields fifty per cent. of hay.—[Bulletin des Sciences Agricoles.]

For the Genesee Farmer.

Sheep.

Late in the summer of 1830, I borrowed $100, and went into the neighboring towns and purchased sixty-eight sheep, at the average cost of $1,30 per head, which left me remaining on hand $13 of my borrowed money. At this time I had on hand twelve sheep; which, with those I bought, made me a flock of eighty head. The next winter I kept them on good fine hay, without any grain, until the first of March, when as the ground was bare, I quit feeding hay and turned them out upon my old pastures, and commenced feeding a little corn. The winter of 1830-31, it will be recollected, was one of uncommon severity; but notwithstanding its length and coldness, I lost but one sheep, and that by casualty. I continued feeding grain until the first of May, when, as the grass had got a considerable growth, I thought it unnecessary, and quit entirely. That season I raised 36 lambs, which increased my flock to 115. In June I sold the wool produced by my old sheep, for $150,06. I went and redeemed my note, and had *left of money I received for wool*, $44. The winter of 1831-32 I fed my sheep as before, but lost three head; consequently, in the spring, had but 112 to shear, which produced 300 pounds; this I sold at the very low price of 35 cents the pound, or $105 for 300 pounds. The same season I raised 45 lambs, and sold 60 head of my old sheep for $78,60; making the amount of sales from my flock that season $181,60. In the winter of 1832-33 I lost 6 sheep, in the spring sheared 91; but in consequence of the great proportion of lambs, the produce of wool was small. I retained a number of fleeces for home use, and sold the remainder (176 pounds) for 50 cents the pound, or $88 for what I had to sell.

Thus it will be seen that my flock, for three years, has averaged 94 head, and that the *actual* sales from it have amounted to $419. The last summer I raised 30 lambs and sold none of my old sheep; consequently in August last, when the three years had expired since my purchase, I had on hand 119 sheep, which is 25 above the average for three years past, and which 25 sheep were worth at that time $2 the head—making $50 for 25. This added to my sales would make $469 for the produce of 94 sheep for three years, or $156,33 for one—equal to $1,66 per head annually.

I have made the following estimate of the expense of keeping 100 sheep for one year. I may be incorrect, if so I hope some of your correspondents will correct me.

Twenty acres of good land, well turfed, will keep 100 sheep a year, viz: five acres of meadow, producing two tons of hay to the acre, will winter, and fifteen acres of good pasture land will summer them. Twenty acres of land at $40 per acre would cost $800; and 100 sheep, at $2 the head, $200; making the cost of land and sheep $1,000.

Interest on $1000 one year, is.....	$70,00
Cutting and securing 5 acres of grass,..	5,00
Thirty bushels of corn, at 4*s*.....	15,00
One barrel of salt, at 16*s*.....	2,00
Washing and shearing 100 sheep,.....	5,00
	$97,00

If the above estimate be correct, it will be seen that I have realized from my flock a nett profit of more than fifty per cent. for three years together.

Genoa, March 31, 1834. W. G. B.

For the Genesee Farmer.

The Potato.

I am one of those who generally read the communications of W. G. with pleasure and instruction; but I hope he will permit me to point to a passage in his remarks on the Potato at page 77, which seems to require further consideration.

The disappearance of many varieties of this plant may be accounted for, without introducing the *hypothesis* of their limited duration. New kinds are abundantly produced, and some of these are of superior quality. It cannot therefore be surprising that some of the old sorts should disappear; but I have seen no proof that they disappear in consequence of deterioration. *I am not acquainted with a single variety that has deteriorated within my remembrance.* The "Old Red Potato" has been known almost fifty years, and it is probably much older; yet it has preserved its peculiar properties *unchanged*, and is still cultivated in this neighborhood. It is perhaps the latest in ripening that is known. It might come more under the class of "waxy" than "mealy;" but it acquires with reasonable care, none of the night-shade flavor in spring, and is preferred by some persons even to the Kidney Potato.

The "Old English White" is another kind which was introduced soon after the first settlements were made in the western parts of New-York; and as far as I can trace its history, it has been known as long as the "Old Red." It differs remarkably from that variety however, in both its color and qualities. It is an early potato, and generally good through the summer and autumn; but later in the season it often becomes *strong*, particularly in the spring. It is very productive, and is still cultivated by some farmers.

A Reader.

For the Genesee Farmer.

Leached Ashes valuable as a Manure.

Many year's experience has established the fact, that for dry sandy loams, no other manure is so lastingly beneficial as leached ashes. The farmers residing on the borders of Hempstead plains, Long Island, have ascertained that that barren soil may be made to produce heavy crops of grain and grass by the use of this article; and although the expense to them is heavy,—in many instances not less than $20 per acre,—the increase of crops so richly remunerates them, that they are gradually inclosing the plains. A farmer residing there informed me, that the beneficial effect of the ashes was visible for seven years; and his statement is confirmed by that of a very respectable farmer of Wayne county, whose soil is a sandy loam. He told me, that in passing through his corn last season, he discovered that a part was far inferior to the rest of the field, and was at a loss to account for it, until he recollected that seven years before he ashed that field, except a part, and discovered by a mark he had made on the fence, that this inferior part was that which was left unashed.

From a paper in the 1st vol. of the New-York Ag. Soc. Trans., by E. L. Hommedieu, it appears, "that ashes are found to succeed best on dry loamy lands, or loam mixed with sand. It is considered as the cheapest manure that can be procured. Ten loads of this manure on poor lands, will produce ordinarily 25 bushels of wheat, which exceeds by $5 the expense of the manure, and the $5 pays for the expense of labor in raising the crop. The land is then left in a state for yielding a crop of hay of between two and two and a half tons per acre, which it will continue to do for a great number of years. No manure continues so long in the ground as ashes."

In many parts of our country where sand predominates, leached ashes may be obtained without any expense but drawing, and in some instances, the owners of pot asheries have assisted to load, for the sake of getting rid of them. Farmers thus situated must be blind to their own interest, if they do not profit by the privilege.

I know by experience that apple trees are greatly benefitted by the application of ashes round them, and I have no doubt but that other fruit trees would be equally benefitted.

It has been ascertained, that *on wet lands ashes are not beneficial*, having a tendency to introduce moss.

Experience has also taught those farmers of Long Island, who have made the greatest use of this article in years past, that when the effect of the ashes has disappeared, a change of manure is more fertilizing than a renewal of ashes.

It is said that grass on light soils is greatly benefitted by a top dressing of ashes, and that the effect will be very visible on the crops which may succeed.

Ontario.

For the Genesee Farmer.

Mangel Wurtzel.

One reason we have to believe that the science of agriculture is becoming more extensive, is that there is evidently a greater willingness to communicate the result of our experience for the benefit of others.

It is no uncommon thing to hear one neighbor boasting over another, of his superior skill in cultivating a particular crop; and if asked to give an account of it, to hear him say,—"Find out by your learning!—I studied it out, and you have the same chance that I had." It is very evident that this is not the spirit of your correspondents, and I hope not of any who read your paper.

I have to request of some of your readers or correspondents to communicate their success in cultivating mangel wurtzel the last season.

In a communication from Mr. Alexander Gordon, published in the third volume, page 242, he states that he visited, at Wheatland, the farm of Mr. *Whiting Merry*, where he saw an extraordinary crop of this plant. It would be very interesting to me, and I presume to your readers in general, if Mr. Merry would give, through your columns, a particular description of said crop—the method of preparing the ground—manner and time of sowing—expense of cultivating, and amount of yield per acre. Also the use to which he applied them—their effects upon different kinds of stock—manner of preserving them through the winter—with such other observations as he may deem proper.

Designing to try my success in the business the coming season, I should particularly prize the experience of one so near home. O. P. Q.

East Bloomfield, March 27, 1834.

[We unite with our correspondent in the re-

quest contained in the above communication, and hope Mr. Merry will answer the questions proposed.—*Editor.*]

For the Genesee Farmer.

Prices of Plaster.

Mr. L. Tucker—I notice in the Price Current published in the Farmer, that gypsum or plaster of paris is sold at Rochester at $6 per ton, and at New-York at $2,88 a $4,25, while at Buffalo we are obliged to pay $13. The plaster sold at New York I suppose is the Nova Scotia plaster—at Rochester that of Wheatland, and that sold at Buffalo is obtained at Venice, Ohio. The Ohio plaster is very white, yet I don't know that it is any better than the Wheatland plaster; and therefore I see no good reason why we should be obliged to pay more than twice as much here as is paid in Rochester for the same article. I wish you would just give some of your plaster dealers a hint of the fact, and see whether they will not supply us here at about $8 or $10 the ton, which at that price would yield a pretty handsome profit for these hard times. H.

Buffalo, N. Y.

On Deep and Frequent Ploughing.

"I entertain no doubt of the utility of deep ploughing; not at once, in our lands in general, but by an increase of two or three inches at every annual ploughing, until the earth be stirred and pulverized to the depth of ten or twelve inches. Indian corn planted in such a mass of loosened earth, would not, I am persuaded, ever suffer by ordinary drouths Like a sponge, it would absorb a vast quantity of rain water, and become a reservoir to supply the want of that and all other plants. Nothing is more common in a dry summer, than the rolling of the leaves of corn; and that circumstance is often mentioned as an evidence of the severity of the drouth. This rolling of the leaves of Indian corn, is the consequence in part, of scant manuring, but still more of shallow ploughing. Few, perhaps, are aware of the depths to which the roots of plants will penetrate in a deeply loosened earth. A gentleman much inclined to agricultural inquiries and observations, informed me, nearly fifty years ago, that seeing some men digging a well, in a hollow place planted with Indian corn, then at its full growth, he stopped to examine how far its roots had descended, and he traced them to the depth of five feet. The soil was an accumulation of earth, which had run or been thrown into the hollow.

"The seeds of the common turnep, sown in warm weather, and on soil sufficiently moist, I have known to vegetate in about eight and forty hours; and in only four or five days afterwards, I found the plants had sent down roots to the depth of four or five inches."—[Mr. Pickering's Address to the Essex Ag. Soc.]

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Sir John Sinclair gives the following maxims respecting the proper depth of ploughing:

1. The depth to which land ought to be ploughed, must first be regulated by the depth of the soil. On thin soils, more especially on a rocky substratum, the ploughing must necessarily be shallow; but when the soil, whether light or strong, will admit of it, the ploughing ought to be as deep as a pair of horses can accomplish; and at some seasons, it is advantageous to plough it even with four, particularly at the commencement of every fresh rotation.

2. The depth ought likewise to depend on the means of improving the soil; for when the land is poor, and the means of enriching it are scanty, the depth of ploughing ought to be in proportion to the quantity of manure which can be obtained.

3. Deep ploughing is highly advantageous upon every soil, excepting those where the substratum is an ochry sand. In fact, such sands are scarcely worthy of being cultivated, unless in situations where much alluvial compost, (marsh mud, &c.) or short town manure, can be procured.

4. It is a general rule never to plough so deep as to penetrate below the soil that was formerly manured and cultivated, excepting upon fallow, and then only when you have plenty of lime or dung to add to and improve the new soil.

5. Many farmers recommend, when fallowing land, to go as deep as possible with the first furrow; by which the subsequent furrows will be more easily done, and to expose the soil to the winter's frost, and to the summer's heat, but when the land is ploughed in the spring for a crop of oats, a strong soil cannot be ploughed in safety, above five or six inches.

6. Deep ploughing is advisable on moorish cold soils, as it affords a greater scope for the roots of plants to procure nourishment, admits the superabundant moisture to subside from them, and prevents the summer drouth from making an injurious impression on the growing crops; for, on such land, shallow ploughing exposes vegetation to be starved or drowned in wet weather, and to be scorched and withered in dry.

7. It is unnecessary to plough deeper, when the seed is sown, than where there is a fair probability of the different kinds of plants sending their roots; and as beans, clover and turneps, the only tap-rooted kinds usually cultivated in this country, seldom send their shoots above seven or eight inches down into the soil, and the culmiferous species not so far, it is probable, from these circumstances, that from seven to eight inches may be deep enough for all the purposes of ordinary culture. Occasionally, however, ploughing even ten inches in the course of a rotation, during the process, is advisable.

Deep ploughing is not to be recommended, 1. When lime or marl has been recently applied, as they have such a tendency to sink, from their weight, and the moisture they imbibe. 2. Where turneps have been eaten off by sheep on the land where they were grown. 3. When grass only two or three years old, more especially where it has been pastured by sheep, is broken up; because, owing to the extreme condensation of the soil, by the trampling of the sheep, a furrow, even of a moderate depth to appearance, will make the plough penetrate below the staple that had been cleared, by the culture given during the previous fallow. By this means, myriads of the seeds of annual weeds are raised to the surface, where they vegetate, and materially injure the crop cultivated, besides replenishing the soil with a fresh supply of their own seeds. In all these cases from four to five inches will be found sufficient. And 4. If land is infested with natural grasses, which generally run much on the surface, the first ploughing should not be deeper than is necessary to turn up the roots of the grasses that they may be destroyed.

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ADVANTAGES OF DEEP PLOUGHING.

1. Bringing up new mold is peculiaaly favorable to clover, beans and potatoes; and, indeed, without that advantage, these crops usually diminish in quantity, quality and value.

2. Deep ploughing is likewise of great consequence to every species of plant, furnishing not only more of nourishment to their roots, but above all, by counteracting the injurious consequences of either too wet or too dry a season. This is a most important consideration, for if the season be wet, there is a greater depth of soil to absorb the moisture, so that the plants are not likely to have their roots immersed in water; and in a dry season it is still more useful, for in the lower parts of the cultivated soil, there is a reservoir of moisture, which is brought up to the roots of the plants, by the evaporation which the heat of the sun occasions.

3. By deep ploughing also, the ground may be more effectually cleared of root weeds of every description; in particular, it is the best mode of eradicating thistles.

4. By deep ploughing, animal and vegetable manures, which have such a tendency to rise to the surface, are properly covered. This cannot be done by shallow ploughing, in consequence of which much of the value of such manure is entirely lost.

5. By deep ploughing a heavier crop is raised than can be got from a shallow furrow. An intelligent farmer indeed, after pointing out that deep ploughing increases the staple of the soil, keeps the roots of the corn from being injured by wetness, and also enables the crop longer to resist drouth, adds, "I have ever found deep ploughing attended with good crops, when ridges, shallow ploughed, in the same field were but indifferent," which seems a decisive proof in favor of deep ploughing.

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The celebrated Arthur Young gives the following rules relative to ploughing:

1. An additional depth should first be gained in autumn, that successive change of seasons may take effect in atmospheric influences, before any seed is ventured in the raw stratum first brought up.

2. The quality of that stratum should be examined; it is sometimes sterile by reason of an acid discoverable by boiling in water, and putting that water to the test of blue infusions.

3 Animal and vegetable manures cannot be buried; at whatever depth they are deposited, their constant tendency is to raise the atmosphere.

4. Fossil manures are extremely liable to be buried, having a constant tendency downwards. Chalk, marl and clay, are sufficiently soluble, or so soluble with water, as to sink in a regular mass, and are sometimes found much below the depth of the plough.

5. In soils of a poor, hungry quality, there should be some proportion observed between the depth of ploughing and the quantity of manure usually spread; but this does not hold good on better soils.

6. Soils are rarely found that ought not to be ploughed, in common, six inches deep; many ought to be stirred eight inches, and some ten.

7. One deep ploughing (to the full depth) should be given once in twelve, eighteen, or twenty-four months; if this be secured, shallow tillage is in many cases preferable to deep working oftener, especially for wheat, which loves a firm bottom.—[N. E. Far.

Culture of the Mulberry.

From a series of essays on Silk, in the Westchester (Pa.) Village Record, written by A. Marshall, we select the following seasonable remarks on the cultivation of the Mulberry:

The first step towards raising silk is the procuring and planting mulberry trees.—Those who cannot conveniently procure trees for planting, can easily raise them from the seed. Seed can be obtained at a cheap rate by application at the seed stores in the city of Philadelphia. An ounce of good clean seed will produce 5000 plants. The nursery ground should have a rich soil, well pulverised by ploughings. Sow the seed in drills about the first of May, much in the same way that you would carrots. The weeds should be carefully extracted during the summer, and in dry times watering will be useful. The next spring, the largest should be taken up and planted in nursery-rows, about a foot or fifteen inches apart, and remain there until they shall have attained sufficient size to be planted in an orchard. The spring following, the remaining plants may be disposed of in like manner, or, they may be set out as hedges to form fences.

All practical writers on the subject agree that the white mulberry makes a line fence inferior to none. Cattle and sheep must be kept from such fences until they arrive at a suitable size to resist their depradations.

This plan of planting the mulberry answers three important purposes; it furnishes food for the silkworm, facilitates the gathering of the leaves, by keeping them within the reach of children, and forms an impenetrable fence that will last for ages. The leaves of mulberry hedges afford the best food for the silk worms in their early ages,* by being more tender than those of standard trees.

Experience and observation have demonstrated, that the shade of mulberry trees is not injurious to the growth of grass, grain, or any other vegetable. This is an important discovery, and argues powerfully in favor of the means of raising silk.

I would advise with humble deference, that every farmer procure mulberry seed, form a nursery, transform all his fences into mulberry hedges, and plant standard mulberry trees along all those hedges half a rod distant from each other. A farm of a hundred acres fenced as above advised, would, in a few years, yield from the fences, a crop worth several hundred dollars!—These fences would be as cheap as any other a farmer could erect, would require no repairs, no renewal, so that all the produce arising from the leaves would be a clear profit. One hundred pounds of leaves will produce, in this country, one pound of reeled silk, if judiciously fed, worth from 4 to 7 dollars; the price being governed by the good or bad reeling. A single tree will produce from 30 to 60 pounds of leaves, depending on the growth of the tree, soil, &c.

From the above remarks, every one can make his own calculations, and act accordingly.

From an article in the New York Farmer, we select the following. The writer is speaking of the common white mulberry:

Cuttings and Layers.—Even the first spring after the seed has been sown, the plants will supply wood sufficiently ripened for a large number of cuttings. They should be from five or six to ten or twelve inches long, and put in the ground nearly half their length. A soil retentive of moisture, and made pretty rich with fermented, particularly cow manure, and in a situation rather shady than otherwise, adds much to the certainty of the success of the cuttings. They may be put at distances most convenient for the grower; in rows that will enable him to hoe them. If the weather, before they are well rooted, be dry, they should be frequently watered.

The white mulberry is also propagated by layers, by bending those limbs nearest to the ground, and fastening in the usual manner the bend some four or six inches under the ground; or a sizable plant may be bent over, nearly flat on the ground, by loosening the earth on the opposite side with a spade. In this way almost every branch will serve for a layer. They may be cut from the parent stock the first or second spring after having been layed.

The Chinese Mulberry.—The Morus multicaulis, Chinese mulberry, was, we believe, first introduced into this country by the late Andrew Parmentier, of Brooklyn, in the year 1828. It has since been greatly propagated, and is rapidly extending over the country. As far as experiments have been made, it promises not only to be a rival of the white mulberry but to supersede it.

Its advantages are its very large leaves, affording a much greater amount of food for the worms; its being a tree of much less hight rendering the gathering of the leaves not so laborious, and the ease with which it can be rapidly propagated by layers and cuttings. It is thought to produce silk equally as good, if not superior to that from the white mulberry. For hedges, it is supposed to be admirably adapted, from its disposition to send up numerous suckers, and from the richness and beauty of its foliage. The rapidity with which it throws out new leaves during the growing season renders it a valuable plant for the rearing of two crops of cocoons.

Propagation.—It is generally increased by layers. A plant of one or more years' growth is bent over, in the spring, or early summer, by loosening the earth; the limbs are extended and firmly secured in the ground by pegs or crotchets. The whole plant and the branches are covered over with the soil to the depth of about an inch. If the soil is rich, a young shoot will rise from almost every joint, and obtain a growth of three to six or eight feet the first season. In the succeeding fall or spring they may be divided into separate plants, and transplanted

If the soil is very rich, the young plants making a vigorous growth, the wood does not always ripen sufficiently to stand the winter of the Northern parts of the Eastern States.

* The life of the silk worm is divided into five ages. It moults, or casts its skin four times, and at each moulting, remains in a state of torpor for about 24 hours, at which times it should be sparingly fed, and by no means disturbed.

Science of Agriculture.

The action of poison on vegetable structure—rotation of crops.

The action of poisons on vegetables is analagous to that which they roduce on animals. One class is corrosive, and destroys the tissue on which it acts; while another class is narcotic, and destroys vitality without producing any decided alteration on the tissue itself. It has been ascertained that nearly all substances which are poisonous to animals, are likewise so to vegetables, though the intensities of their several actions are different in the two kingdoms; but, besides these, there are many substances innoxious to animals, which are destructive to vegetable life. In fact, it should seem that almost every thing that vegetables can imbibe is injurious to them, excepting water, the insipid earthy salts, carbonic acid, and other gases, gums, and mucilaginous substances, and finally, certain animal matters when introduced in very weak solution. It has been supposed that the presence of a nervous system might be assumed to exist in vegetables, from the mode in which they are destroyed by narcotic poisons; but there is this remarkable difference in the mode in which these substances act on animals and on vegetables: on the former they act by "sympathy" upon certain parts with which they have no immediate contact, while in the latter they produce their effect only on those parts of the tissue into which they are introduced. In vegetables, also, all poisons exert their action upon the cellular tissue, while in the more complicated structure of the animal frame different poisons will attack only particular tissues; which again seems to prove the existence of no more than one single faculty in vegetable life, as we concluded to be the case, from other considerations, in the beginning of this article. It is a curious fact in the action of vegetable poisons, that a plant may be killed by the poison which it has itself secreted, as a viper may be stung to death by its own venom. Hence it has been very generally noticed, that the soil in which any particular plant has grown, and into which it has consequently discharged the excretions of its roots, is rendered noxious to the growth of plants of the same or of allied species, though it be quite adapted to the support of other species. This fact is of the greatest importance in an economical point of view, as the whole theory of the rotation of crops may be considered to depend upon it. The discovery of this important step in agriculture was probably made by the Belgians; at least they have the merit of having developed the theory of it. Formerly it used to be said, that the whole secret of good husbandry consisted in ploughing well, and in manuring well; but to these must now be added the equally important art of so arranging the cultivation of different crops that they may mutually assist each other, and thus enable the farmer to obtain the greatest possible annual return from the same land. The whole theory depends upon the fact, that all plants succeed badly upon lands which have lately borne crops of the same species as themselves, or even of the same genus, or of the same family. This effect is not owing to any exhaustion of the soil that must have taken place during the growth of the previous crop, but arises from a corruption of the soil, by the intermixture of vegetable excretions given out at the root, which excretions are always more deleterious to plants of the same kind than to others. It is even ascertained that the excretions of some plants are beneficial to the growth of others of a different family; the *Leguminosæ*. for example, improving the soil for the *Gramineæ*. Agriculturists have proposed various theories to account for the beneficial results obtained by a rotation of crops. Some have supposed that one species, by its denser foliage, chokes the weeds which otherwise would spring up, and assists the crop in exhausting the soil; others have attributed the improvement that has taken place to the remains of the previous crop, which they suppose may have acted as manure; a third have said, that the roots of different crops extend themselves to different depths, and so extract their nourishment from portions of the soil which do not interfere with each other; and lastly it has been urged that plants of different families may possibly derive their nourishment from different materials. It may be true that some of these causes have a certain degree of influence in determining which may be the most proper plants for a rotation, but they can only be considered as of very secondary importance when compared with that which relates to the deterioration of the soil, by its intermixture with the radical excretions of a previous crop. After enumerating some of the collateral circumstances which should direct the judgment of cultivators in selecting such plants as may be best adapted to a rotation of crops in any particular district, De Candolle proposes the following fundamental and physiological principles, which ought to be attended to where complete success is to be expected. *First*, a new crop ought never to succeed another of the same kind, unless under some very peculiar circumstances, as where the soil is annually renewed, or where it is naturally so fertile as to be capable of resisting the inconveniences which ordinarily result from such a system. *Secondly*, a new crop ought not to succeed another which has been raised from plants of the same family. A remarkable exception to this rule occurs in the practice adopted in the valley of the Garonne, where the soil admits of a biennial alternation between wheat and maize. *Thirdly*, all plants with acrid and milky juices injure the quality of the soil, and their remains should never be buried after the removal of a crop. *Fourthly*, plants with sweet and mucilaginous juices improve the soil for others of a different family. The chief of these are the *Leguminosæ*, which are commonly adopted in practice for this purpose.—*Foreign Quarterly Review.*

To Extract Grease.—Spirits of wine and hartshorn mixed together, will restore the colors to silk that is faded in spots. The spirits of wine will take out the grease.

Another.—Scrape a little French chalk on grease spots, on any colored silk, and after a few hours they will entirely disappear.

To clean White Satin.—Fresh chalk must be strewed over it, and then well brushed with a hard brush. Should the satin not be sufficiently clean by the first dusting, it may be done a second time, and it will both clean and beautify the satin. The more it is brushed the better.

Imitation of Gold.—"A Chimist," of Washington City, publishes the following recipe for a preparation, which, applied to iron, will make it look like gold:

"Take of linseed oil, three ounces; tartar, two ounces; yolk of eggs, boiled hard and beaten, two ounces; aloes, half an ounce; saffron, five grains; turmerick, two grains. Boil all these ingredients in an earthern vessel, and with it wash the iron, and it will look like gold. If there be not linseed oil enough you may put in more."

Miscellaneous Selections.

On the Culture of the Garden Bean.—I have been very successful for half a dozen years in obtaining two crops of beans from the same plants. In the summer of 1826, my first crop of magazan and early long-pod beans was, by a very strong and violent wind, blown down; this was done when the beans were in full blossom. The crop from the blossoms which the plants then possessed was very fine and abundant, and gathered during July. In three weeks after the beans were prostrated, each stem pushed forth from near the root one or more, in some instances four to six fresh stems; these bloomed freely and produced an abundant crop, which was gathered during September. Since that grew, I have uniformly bent down, so as to break the stalk near the root, my first and second crops of beans; I have by this means obtained four crops of beans from two sowings, and which supplied me from July 1st to 31st October. By this method only half of the seed was required which I had been accustomed to use, and the greatest advantage to me was that only half of the ground was required, so that my advantages by this method are fourfold. I always pinch out the tops when the plants are in full bloom; this throws the vigor into the production of fruit instead of a continued increase of stem and foliage.—[Mr. James Falkland, Pentonville, in the Gardener's and Forester's Record, No. 3.]

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The Turnep Fly.—We some time ago mentioned, (says the Quarterly Journal of Agriculture,) in regard to avoiding the attacks of the turnep fly, that a farmer completely succeded in avoiding them for many years, by rubbing, keeping and sowing his turnep seed among flour of sulphur. Since the turnep insect is attached to the turnep seed, it is clear that the sulphur must have destroyed them. This attachment of the nidus of the insect to the seed is a very remarkable circumstance, and requires farther investigation than the experiments above related, to establish the fact as a general one.

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Chinese Roses may be propagated from single buds, as grape vines are propagated. The single bud, with a quarter of an inch of the stem, both above and below it, is placed just under the soil, under a bell-glass; the leafstalks and leaves standing upright as in a cutting. A single bud of Rosa semperflorens sanguinea was planted on July 26, and on September 8, it was six inches high, and side shoots were being produced.—[Charles M. Willich, London, Oct. 8, 1833.

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Large Crop of Turneps.—We take the following from the Rutland (Vt.) Journal:

Mr. Maxham: *Sir*—For the entertainment of the readers of the Journal, I take the liberty to tell you about my English turneps. In May or June last I sowed a patch of the flat English turneps for early use, and after using what we wanted in the summer, the remainder stood till fall. When we came to harvest them, they were so large and fair, that I was induced to measure the ground, and also to weigh and measure the turneps. After pulling and trimming them, the smallest turnep weighed one pound and nine ounces, and the largest ten pounds and ten ounces. The average weight of the whole number was five pounds and one ounce. One third of the number averaged eight pounds and six ounces each; and seven of the largest more than filled a bushel basket, well packed. Upon a fair measurement, they produced at the rate of 2500 bushels to the acre. The circumference of one was 30 inches; another 31½; another 35. They were perfectly free from maggots.

Yours, respectfully, John Sweetland.

Wallingford, October, 1833.

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Lime Spreading.—We last week had an opportunity of witnessing the performance of a machine for spreading lime invented by Mark Wilson, of this county, and by him patented. Although the machine was much worn, being one of the first constructed, it spread near an hundred bushels in an afternoon. It is quite simple, and could be made, with the exception of the cog-wheels, by any one accustomed to the use of the saw and hatchet. It spreads the lime in any proportion desired, from 10 to 70 bushels to the acre, and with more uniformity than can be done with a shovel. The machines are made for one or two horses, and it is ascertained that two men can spread, with a two horse machine, four hundred bushels per day. It can be used in windy, as well as in calm weather, no inconvenience arising from the dust therefrom.

We conceive it to be an improvement of much consequence to farmers, who make use of lime as manure, entirely doing away a most disagreeable yet necessary branch of their business. The machines, for two horses, cost about 30 or 35 dollars, and as no one farmer could have constant use for them, by three or four joining together, the expense would be so trifling that we should presume every neighborhood would be able to have among them one of these labor-saving machines.—[Bucks Co. Intel.]

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Preserving Eggs.—In 1820, a tradesman of Paris asked permission of the prefect of police to sell, in the market, eggs that had been preserved a year in a composition, of which he kept the secret. More than 30,000 of these eggs were sold in the open market, without any complaint being made, or any notice taken of them, when the board of health thought proper to examine them. They were found to be perfectly fresh, and could only be distinguished from others by a pulverous stratum of carbonate of lime, remarked by M. Cadet to be on the egg shell. This induced him to make experiments which ended in his discovering that they were preserved in highly saturated lime water. M. Cadet suggests adding a little saturated muriate of lime, but gives no reason. They may also be preserved by immersing them twenty seconds in boiling water, and then keeping them well dried in fine sifted ashes; but this will give them a greyish green color. The method of preserving them in lime water has been long the practice of Italy; they may be kept thus for two years. This useful mode is well known in many parts of England, and cannot be too much recommended.—*Mechanic's Magazine.*

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Salt and Lime for Manure.—In a note to Mr. Whitaker's Address, we find the following:

Dr. Cornelius Dupont, of St. George's Parish, made an experiment, a few years ago, with a mixture of quicklime and salt, as a manure, which he found highly beneficial. The land to which this mixture was applied, was a silecious soil with an aluminous basis. Vegetable manure was first spread upon the list, and after the land was planted, the mixture was strown upon the top of the bed in the proportion of one bushel of salt or two bushels of lime to the acre. The product of cotton, resulting from this application, was nearly double the usual crop gathered from the same land cultivated in the ordinary way.—*New-York Farmer.*

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Draining.—In low lands, where furrows are substituted for under drainings, it is calculated that the loss of seed in the furrows, and the superiority of the crops, would, in *two years*, pay the expense of the draining.—*Ib.*

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Plug or Clay Draining.—Mr. Evans, in the Edinburgh Quarterly Journal, states that he has made, on his premises, 300 miles of clay drains, not one of which has given way. They are made about thirty inches deep, two wide at bottom, and some twenty or thirty at top. A plug is put in the bottom, and after clay is pounded on it, and soil filled in, it is drawn out by a chain attached to it.—*Ib.*

Flower Seeds.

THE Publisher of this paper has received from Wm. Thorburn, Seedsman, Albany, an assortment of Annual and Perennial Flower Seeds, comprising 53 sorts. These Seeds were raised at the *Albany Nursery* the past season, and are neatly done up in labelled papers—price 6 cents per paper.

March 28, 1834. L. TUCKER.

List of Subscribers

Who have paid for the 4th volume of the Genesee Farmer.

Palmer Ferguson.	Zeno Comstock.
T. J. Walker.	Stephen Connor.
S. Sarvis.	Edmund Ruffin.
Col. S. W. Baldwin.	Amaziah Allen.
Simon Chapman.	A. L. Freeman.
Maj. John B. Dill.	Moses Kinne.
Dr. John L Eastman.	Perry Howland.

The following have paid to July 1, 1834.

John Whippo.	Wm. Wetmore.
B. S. Cheever.	B. F. Congdon.
E. B. Colman.	Wm. Birdsall.

PRICES CURRENT.

ARTICLES.	PER	ROCHESTER. *April 12.*	NEW-YORK. *April 7.*
Ashes—Pot....	100lbs.	$3,25.....	$4,50 a 0,00
—— Pearl..	.....	3,50.....	4,65 a 4,70
Beeswax, yellow	lb.	0,16 a 0,18	20 a 21
Candles, mould	.....	0,10 a 0,12	13. a 14
—— dipped.	.....	0,10a0,10½	11 a 12
Cloverseed.....	.....	6½.... ...	6½.a.7½
Flax, American.	.....	.....	8..a.8½
Flax seed, clean	tierce	9,00a10,00	12,00a00,00
Flour, Western.	barrel	4,75.....	5,12 a5,25
Grain, Wheat..	bushel	0,80.....	1,05 a1,10
—— Rye....	.....	0,62.....	50.a..52
—— Oats...	.....	0,25.a..27	30.a..3.
—— Corn...	.....	0,46.....	52.a..54
—— Barley..	.....	0,50.a..56	70.a..71
Hemp, Americ'n	ton	.....	100 a 125
Hops, 1st sort..	lb.	.....	17.a..18
Plaster Paris...	ton	6,00 a 0,00	2,75 a0,00
Beef, Mess....	barrel	0,00 a10,00	8,75 a 9,50
—— Prime....	.....	0,00 a 8,00	5,50 a 5,75
Pork, Mess....	.....	14,00a15,00	12,50a14,25
—— Prime....	.....	11,00	9,12a10,50
—— in the hog.	100lbs.	4,00.....	.....
Hog's Lard....	.....	8,00 a 9,00	6,50 a 8,50
Tallow.....	.....	7,50 a 8,00	7,50.....
Hay.....	ton	6,00 a 7,00	12,50a15,00
Apples.....	bushel	25.a..50	.....
Potatoes.....	.....	18.a..25	.....
Cheese.....	lb.	6.a...8	7½.a.09
Butter.....	.....	12..a.14	15.a..17

Cheap Dahlias, Chinese Mulberries, &c.

WILLIAM PRINCE & SONS, Flushing, having greatly increased about 300 of their splendid varieties of Dahlias, now offer them at the follwing *reduced prices*, and they are ready to supply *five thousand* immediately at these rates:

Double Dahlias, 12 distinct varieties, with their names, comprising such sorts as have been most increased, for $3 00

Double Do., 12 distinct varieties, with their names, comprising kinds more rare and beautiful, for $4 50

Double Do., 12 distinct varieties, with their names, comprising such kinds are still more rare and extremely beautiful, $6 00

In addition to the splendid collection which last season covered an acre of ground, every new variety of great celebrity has been recently imported from Europe, and the *Amateurs* may now have their utmost wishes gratified at prices reduced to accord with the times.

Levick's Incomparable, with scarlet petals tipped with white, now offered at $2,50

Chinese Mulberry, or Morus multicaulis, at $25 per 100, or $4,50 per dozen.

Twenty-five busheles new Italian Rye Grass; 50 do. Pacey's Perennial do.; 100 do. English Potatoe Oats and Early Angus do.; 1500 lbs. superior Province Luzerne; 150 lbs. Tripolium incarnatum, and various other Seeds. The prices of Roses, and of various Fruit and Ornamental Trees, &c. have been much reduced. Catalogues will be sent to every applicant, and all packages will be shipped precisely as directed, and with particular dispatch.

Linnæan Garden and Nurseries, April 3, 1834.

apr 12-2t

Sap Buckets.

2000 SAP Buckets for sale at the Rochester Pail, Tub and Churn Factory near Frankfort market, State-street.

mo. 18th, 1834.—mar 1-flm

The Spring.

The soft green grass is growing
O'er meadow and o'er dale;
The silvery founts are flowing
Upon the verdant vale;
The pale snow-drop is springing,
To greet the glowing sun;
The primrose sweet is flinging
Perfume the fields among;
The trees are in the blossom,
The birds are in their song:
As spring upon the bosom
Of nature's borne along.

So the dawn of human life
Doth green and verdant spring;
It doth little ween the strife—
Like the snow drop it is fair,
And like the primrose sweet;
But its innocence can't scare
The blight from its retreat.

"Owe no Man!"

How happy the man who owes not a pound,
But lays up his fifty every year that comes round!
He fears neither constable, sherif nor dun;
To Bank or to Justice has never to run.
His cellar well filled, and his pantry well stor'd,
He lives more bless'd than a prince or a lord:
Then take my advice, if a fortune you'd get,
Pay off what you owe and keep out of debt.

This may be bad poetry, but depend upon it, it is excellent sense. It is an old saying that the debtor is a slave to his creditor. If so, half the world enter into voluntary servitude. The universal rage to buy on credit, is a serious evil in this country. Many a married man is ruined entirely by it.

Many a man goes into a store, for a single article. Looking around, twenty things strike his eye; he has no money, and buys on credit. Foolish man! Pay day must come, and ten chances to one, like death, it finds you unprepared to meet it. Tell me, ye who have experienced it, did the pleasure of possessing the article bear any proportion to the pain of being called on to pay for it when you had it not in your power?

A few rules, well kept, will contribute much to your happiness and independence.

Never buy what you do not really want.

Never buy on credit when you can possibly do without.

Take pride in being able to say, 'I owe no man.'

Wives are sometimes thoughtless, daughters now and then extravagant. Many a time when neither the wife nor the daughter would willingly give a single pang to the father's bosom, they urge and tease him to get articles, pleasant enough to be sure to possess, but difficult for him to buy; he purchases on credit, is dunned---sued; and many an hour made wretched by their folly and imprudence. Have a care---have a care! Life is short, at the longest. Do not then embitter it by imprudence, carelessness, and improvidence!

Good Advice to young Men.

It is highly important, my young friends, that you early acquire and establish habits of economy in matters of expense. It is important to your own personal welfare—to your success in the world, as to the welfare of your country. Young people are apt to entertain extravagant and absurd notions of life—to estimate their enjoyments by the money they cost: to choose enjoyments which are expensive, and connected with display. But you may depend upon it, the most valuable enjoyments are easily obtained; they cost but little money, and are within the reach of all, of the poor as well as of the rich. If a person's design is to secure such privileges and enjoyments only as are connected with virtue, with sobriety, intellectual improvement and elevation of character, he may carry his designs into operation with very limited funds. It is dissipation, sensual enjoyments,—enjoyments which have no good moral tendency—it is such enjoyments as these that cost money, and very often put young persons upon disagreeable expedients to meet their expenses. The truth is men's indispensable wants, are few—but those wants which their own folly have created or which the absurd customs of society have imposed—these wants are all expensive; and they do more than a little to prevent young people rising in the world; to bring on failures, discouragements, habits of intemperance and crimes.--HILDRETH.

Door Yards.

Some people pretend that a man's character may be learned from the shape of his nose, or the shape of his head. Honest people may be permitted to doubt whether this is so; but that a man's character, in some particulars, may be learned from the appearance of his door yard, no reasonable man can doubt. It is suggested in the new Williamstown paper, that one reason why so many door yards are neglected, is that it is a spot of doubtful jurisdiction, neither falling exactly within the scope of the word "*farm*," which it is the province of the man to oversee, nor being properly in the house where the woman reigns, but if there is any question of this sort it ought to be settled without delay, for a slovenly door yard is a pretty infallible indication of a slovenly farmer, a slovenly wife, and a slovenly house. Old leaves, sticks, chips, bones and old weeds, a broken falling fence, in short, any thing but a neat door yard is a suspicious circumstance. The paper aforesaid suggests that "without entering on the delicate question of right, that this province be made over to the ladies; and that they have full power to call upon any idle man or boy about the house to aid and abet them in its due regulation."

We think this a good proposition, for there, where is neither an idle man or idle boy, the door yard is as neat as wax-work. --*Springfield paper.*

Dr. Arnott's Hydrostatic Bed.

This bed, when designed for a single person, is a trough, six feet or more in length, thirty inches wide, and one foot deep. When designed for two, one foot or more must be added to the width. This trough is filled about two thirds full of water, or other liquid. Over this a sheet of India rubber water-proof cloth, fifteen inches or more wide, and somewhat longer than the trough; this is secured to the top of the trough all around, in a water-tight manner. This is best done by screwing down upon it a strip of board, of the width of the thickness of the plank that forms the trough. Thus secured, should any accident perforate, or otherwise injure the cloth, it can be taken off and mended without injury to the trough. The cloth being wider than the trough, it lies loosely in folds over the water on which it floats, and may be pressed to the bottom without any strain on the cloth. This trough may be placed within the frame of a common bedstead, supported by two joists bolted to the bedstead, which, by the means of screws, may be raised or lowered at pleasure. Over this a matress or feather bed is thrown, the bed dressed in the usual manner. On this the patient floats, in still or undulating water, as he chooses,---a trifling exertion of the muscles will put the whole in motion. It forms a perfectly luxurious bed, as much softer than down as down is softer than straw.—*Bost. Med. Mag.*

Plaster.

THE subscriber is prepared to furnish any quantity of the first rate Plaster from the beds in Phelps, on the most favorable terms. It will be delivered at any place on the Canal immediately after the commencement of navigation. Gentlemen wishing to purchase are invited to make application to the subscriber at Newark, Wayne co. or to LUTHER TUCKER, at the office of this paper.

C. S. BUTTON.

March 28, 1835. mar 28

Valuable Sheep for Sale.

THE subscriber having more SHEEP than he wishes to keep through the summer, will on or before the first of June next, sell about eighty of his fine wooled Ewes with their lambs. Farmers wishing to commence or increase their flock of sheep, will seldom meet with as profitable a lot of Ewes. The greater part of them have been raised from rams from the flock of the Hon. R. S. Rose, and the lambs to be sold with them are from rams selected from the above mentioned flock, which for quality of wool, is not excelled in the United Sates. The subscriber has also 135 three and four year old Wethers of the first quality, which he will sell about the same time. JOHN JOHNSON.

Fayette, Seneca County, Feb. 7, 1833. feb 8-f3m

Albany Nursery.

THE proprietors are enabled to publish, that in addition to their ordinary assortment of FRUIT TREES & PLANTS,—they have particularly a fine assortment of PEAR AND PEACH TREES, of the most approved varieties, in good condition for transplanting. They have also a large supply of HORSE CHESTNUTS, which they offer at 31 cents, in quantities of 100 or more, and at 37 1-2 single. Their collection of the Double Dahlia exceeds 300. Roots will be supplied to order at any time, or growing plants of the finer kinds, safely packed, will be forwarded in May by canal. The plants will generally flower in June and July, and till frost in autumn.

Orders for Trees or Plants may be left with L. TUCKER, Rochester, or forwarded to the Proprietors at Albany. BUEL & WILSON.

Albany, March 14, 1834. mar 22-4t

MONROE GARDEN AND NURSERY.

GREECE, NEAR ROCHESTER, N. Y.

THE subscriber offers to the public a choice selection of Fruit Trees, of French, German, English and American varieties, consisting of Apples, Pears, Plums, Peaches, Cherries, Apricots, Nectarines, Quinces, Currants, Gooseberries, Raspberries, Strawberries, Ornamental Trees Shrubs, Plants, Hardy Roses. Vines, Creepers, Herbaceous, Perennial Plants, Bulbous Roots, &c.

Also, a few hundred of the Morus Multicaulis or Phillipine Mulberry, the white Italian Mulberry by the hundred or thousand, English Hawthorn Quicks, Grape Vines of both native and foreign varieties, mostly of large size, for sale by the single vine, hundred or thousand at reduced prices The subscriber has a large Green House well filled with a large collection of choice Green-Hous Plants in good condition.

All orders, by mail or otherwise, wil be promptly attended to, and packages delivered in Rochester or at the mouth of Genesee River.

ASA ROWE.

Orders for Mr. Rowe's Nursery received by the Publisher of this paper.

Catalogues may be had at the office of the Genesee Farmer—will be sent to those who wish them gratis. October 5, 1833. f6m